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09/917,638	07/31/2001	Kwok-Wai Cheung	007198-419	1621

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EXAMINER
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PWU, JEFFREY C

ART UNIT	PAPER NUMBER
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2143

DATE MAILED: 12/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/917,638

Applicant(s)

CHEUNG ET AL.

Examiner

Jeffrey C. Pwu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-103 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-103 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>02/19/02, 01/22/02</u> | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Title***

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### ***Abstract***

2. Applicant is reminded of the proper language and format for an abstract of the disclosure. The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The invention describes," "The disclosure defined by this invention," etc.

### ***Claim Objections***

3. Claims 72 and 73 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only. See MPEP § 608.01(n). Accordingly, the claims not been further treated on the merits.
4. Claims 2-103 recite the symbols "K", "M", "N", "J", "m", "R", "E", "J", and "B". There is insufficient antecedent basis for the symbols in the claim. It is unclear what are the symbols represent in the claim.

### ***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1 and 79 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1 and 79 are vague and indefinite because it is unclear how to generate an anti-latency data stream containing a leading portion of data receipt by the client? Furthermore, it is unclear how to generate an interactive data stream containing at least a remaining portion of the data for the client to merge into after receiving at least a portion of the anti-latency data stream.

7. Claim 100 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 100 is vague and indefinite because it is unclear how to pre-fetching the leading portion of a pre-fetched data; and/or how to merge the pre-fetched data to a remaining portion in the claim.

8. Claims 76-78 and 102 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 76 and 102 are vague and indefinite because it is unclear what time frames are considered off-peak periods.

9. Claims 80 and 89 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant

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regards as the invention. Claims 80 and 89 are vague and indefinite because it is unclear when does a client raises a request for the data?

10. Dependent claims are also rejected as being dependent upon rejected base claims.

***Claim Rejections - 35 USC § 102***

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

12. Claims 1-103 are rejected under 35 U.S.C. 102(e) as being anticipated by Chaddha (U.S. 6,233,017).

With respect to claims 1-4, 41, 74-75, 77-81, and 100-103:

Chaddha teaches:

1. A method for transmitting data over a network to at least one client having a latency time to initiate transmission of said data to the client, including the steps of:  
generating at least one of anti-latency data stream containing at least a leading portion of data for receipt by the client; and (9)  
generating at least one interactive data stream containing at least a remaining portion of said data for the client to merge into after receiving at least a portion of an anti-latency data stream. (11)

2. The method of claim 1, wherein: said data is fragmented into K segments each requiring a time T to transmit over the network; the anti-latency data streams includes M anti-latency data streams; and the interactive data streams includes N interactive data streams. (fig. 10b)

3 The method of claim 1, wherein: the anti-latency data streams contains the leading portion of said data only; the interactive data streams contains a whole set of said data. (fig. 10b)

4. The method of claim 2, wherein: each of the M anti-latency data stream contains substantially identical data repeated continuously within said anti-latency data stream, and wherein each successive anti-latency data stream is staggered by an anti-latency tie interval; and each of the N interactive data stream repeated continuously within said interactive data stream, and wherein each successive interactive data stream is staggered by an interactive time interval. (col. 14, line 54-col. 16, line 34)

41. The method of claim 2, wherein the M anti-latency data streams contains the leading portion of said data; and further includes two batches of data streams being a 1st set of anti-latency data streams and a 2nd set of anti-latency data streams. (col. 15, lines 15-50)

74. A method for transmitting data over a network to at least one client including the step of fragmenting said data into K data segments each requiring a time T to transmit over the network, wherein each of the K data segments contain a head portion and a tail portion, and the head

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portion contains a portion of data of the tail portion of the immediate preceding segment to facilitate merging of the K data segments when received by the client. (col.15, lines 15-50)

75. A method for transmitting data over a network to at least one client having a latency time to initiate transmission of said data to the client, including the steps of: generating at least one of anti-latency data stream containing at least a leading portion of data for receipt by the client; (9) pre-fetching the leading portion in the client as pre-fetched data, and generating at least one interactive data steam containing at least a remaining portion of said data for the client to merge into the leading portion. (col.14, line 32-65)

79-80. A method for transmitting data over a network to at least one client including the steps of generating a plurality of anti-latency data streams, the anti-latency data streams include: a leading data stream containing at least one leading segment of a leading portion of said data being repeated continuously within the leading data stream; and a plurality of finishing data streams, each of the finishing data streams: containing at least the rest of the leading portion of said data; and repeated continuously within said finishing data stream, and wherein each successive finishing data stream is staggered by an anti-latency time interval. (col.14, line 54-col.16, line 34)

81. The method of claim 79, wherein said data is fragmented into K segments each requiring a time T to transmit over the network and the anti-latency time intervals T. (11)

100. A method for receiving data being transmitted over a network to at least one client, wherein said data includes a leading portion and a remaining portion, and the remaining portion is transmitted by at least one interactive data stream including the steps of: pre-fetching the leading portion in the client as pre-fetched data; and merging the pre-fetched data to the remaining portion. (col.14, line 54-col.16, line 34)

101-103. The method of claim 100 further including the step of refreshing the pre-fetched data during a refresh time period and wherein pre-fetched data is refreshed once per day. (col.4, lines 25-49)

13. Dependent claims are also rejected as being dependent upon rejected base claims.



14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

15. Claims 1-10, 12-21, 23-32, 34-38, 41, 72-84, 86-87, 89-97, and 100-103 are rejected under 35 U.S.C. 102(b) as being anticipated by Kermode et al. (U.S. 6,018,359)

Kermode et al. teaches a method for transmitting data over a network to at least one client having a latency time to initiate transmission of said data to the client, including:

- generating at least one of anti-latency data stream containing at least a leading portion of data for receipt by the client; and (100, 110; Ps)
- generating at least one interactive data stream containing at least a remaining portion of said data for the client to merge into after receiving at least a portion of an anti-latency data stream. (P<sub>A</sub>)
- wherein: said data is fragmented into K segments each requiring a time T to transmit over the network; the anti-latency data streams includes M anti-latency data streams; and the interactive data streams includes N interactive data streams. (Fig.2)
- wherein: the anti-latency data streams contains the leading portion of said data only; the interactive data streams contains a whole set of said data. (Fig. 2)

- each of the M anti-latency data stream contains substantially identical data repeated continuously within said anti-latency data stream, and wherein each successive anti-latency data stream is staggered by an anti-latency tie interval; and each of the N interactive data stream repeated continuously within said interactive data stream, and wherein each successive interactive data stream is staggered by an interactive time interval. (col.2, line 41-col.4, line 45)

- wherein: said data requiring a time R to be transmitted over the network is fragmented into K segments each requiring a time T to transmit over the network; the anti-latency data streams includes M anti-latency data streams, wherein each of the M anti-latency data stream contains substantially identical data can be generated at regular anti-latency time intervals; and are generated at the next earliest anti-latency steam interval after the client raises a request for said data; the interactive data streams includes N interactive data streams, wherein each of the N interactive data stream is repeated continuously within said interactive data stream, and each successive interactive data stream is staggered by an interactive time interval. (col.2, line 41-col.4, line 45)

- wherein: each of the M anti-latency data stream has J segments; and the anti-latency time interval greater than/equal to T. (Fig.4; P0, P1, P2, P3)

- wherein the interactive time interval greater than/equal to JT. (Fig.4; P0, P1, P2, P3)

5. The method of claim 4, wherein  $M$  greater than/equal to  $J$ . (col.6, line 45-col.8, line 44)

- wherein  $N$  greater than/equal to  $R/J$ . (col.6, line 45-col.8, line 54)
- wherein each of the  $N$  interactive data streams contains the whole set of said data having  $K$  segments. (col.6, line 12-col.7, line 20)
- wherein each of the  $N$  interactive data streams contains the remaining portion of said data only. (col.6, line 12-col.7, line 20)
- connecting the client to the  $M$  anti-latency data stream generated for the client when the client raises the request for said data; connecting the client to any one of the  $N$  interactive data streams; and terminating the  $M$  anti-latency data stream generated for the client after the client is connected to one of the  $N$  interactive data streams. (col.6, line 12-col.8, line 17)
- wherein the interactive data streams includes  $N$  interactive data streams, wherein each of the  $N$  interactive data streams is repeated continuously within said interactive stream, and each successive interactive data stream is staggered by an interactive time interval. (col.6, line 12-col.8, line 17)
- wherein each of the finishing data stream has  $J$  segments; and the anti-latency time interval

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greater than/equal to  $T$ . (col.6, line 12-col.9, line 9)

- wherein the interactive time interval greater than/equal to  $JT$ . (col.6, line 12-col.9, line 9)
- wherein  $M$  is greater than/equal to  $J/2 + 1$ . (col.6, line 12-col.9, line 9)
- wherein  $N$  is greater than/equal to  $R/JT$ . (col.6, line 12-col.9, line 9)
- wherein each of the  $N$  interactive data streams contains the whole set of said data having  $K$  segments. (col.6, line 12-col.9, line 9)
- wherein each of the  $N$  interactive data streams contains the remaining portion of said data only.  
(col.6, line 12-col.9, line 9)
- further including the steps of: connecting the client to the leading data segment generated for the client when the client raises the request for said data; subsequently connecting the client to the corresponding finishing data stream; connecting the client to any one of the  $N$  interactive data streams; and terminating the leading data segment and the corresponding finishing data stream generated for the client after the client is connected to one of the  $N$  interactive data streams. (col.6, line 12-col.9, line 9)

16. Dependent claims are rejected as being dependent upon rejected base claims.

*Allowable Subject Matter*

17. Claims 11, 22, 33, 39-40, 42-49, 50-71, 85, 88, 98-99 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey C. Pwu whose telephone number is 571-272-6798.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on 571-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



12/12/05

JEFFREY PWU

DEPUTY EXAMINER